

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
09/700,950	11/20/2000	Joel A. Dyksterhouse	405200002USD	4817	
27572 75	590 02/13/2003				
•	OICKEY & PIERCE,	EXAMINER			
P.O. BOX 828 BLOOMFIELD HILLS, MI 48303			TENTONI, LEO B		
			ART UNIT	PAPER NUMBER	
			1732		
			DATE MAILED: 02/13/2003	•	

Please find below and/or attached an Office communication concerning this application or proceeding.

		1 2		$-\mathcal{Q}_{V}$
•		Application No.	oplicant(s)	. #
	Office Action Summan	09/700,950	DYKSTERHOUSE, JOEL	. A
	Office Action Summary	Examiner	Art Unit	
	The MAN INC DATE of the	Leo B. Tentoni	1732	
Period fo	• •			-
THE I - External after - If the - If NO - Failur - Any r	ORTENED STATUTORY PERIOD FOR REPL' MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1.1: SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period re to reply within the set or extended period for reply will, by statute eply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a y within the statutory minimum of thi vill apply and will expire SIX (6) MOI , cause the application to become A	reply be timely filed  rty (30) days will be considered timely.  NTHS from the mailing date of this communication  BANDONED (35 U.S.C. § 133).	ation.
1)🖂	Responsive to communication(s) filed on 23	lanuary 2003 .		
2a) <u></u>	This action is <b>FINAL</b> . 2b)⊠ Th	is action is non-final.		
3) <u> </u>	Since this application is in condition for allowed closed in accordance with the practice under ion of Claims			ts is
4)⊠	Claim(s) 52-58 and 62-80 is/are pending in the	e application.		
	4a) Of the above claim(s) is/are withdraw	wn from consideration.		
5)□	Claim(s) is/are allowed.			
6)⊠	Claim(s) 52-58 and 62-80 is/are rejected.			
7)	Claim(s) is/are objected to.			
	Claim(s) are subject to restriction and/o	r election requirement.		
Applicati	on Papers		•	
• —	The specification is objected to by the Examine			
10) 🔲	The drawing(s) filed on is/are: a)□ accep	oted or b) objected to by	the Examiner.	
_	Applicant may not request that any objection to the	• ,	` ,	
11)[	The proposed drawing correction filed on		disapproved by the Examiner.	
	If approved, corrected drawings are required in rep	•		
·	The oath or declaration is objected to by the Ex	aminer.		
Priority (	under 35 U.S.C. §§ 119 and 120			٠
13)	Acknowledgment is made of a claim for foreign	n priority under 35 U.S.C.	§ 119(a)-(d) or (f).	
a)	☐ All b)☐ Some * c)☐ None of:			
	1. Certified copies of the priority documents	s have been received.		
	2. Certified copies of the priority document	s have been received in A	Application No	
* 5	3. Copies of the certified copies of the prior application from the International Buse the attached detailed Office action for a list	reau (PCT Rule 17.2(a)).	•	
	acknowledgment is made of a claim for domesti	·		ation)
a	)  The translation of the foreign language pro Acknowledgment is made of a claim for domesti	visional application has b	peen received.	
Attachmen	•	,,	· 90	
1) Notic	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s) <u>1</u>	5) Notice of	Summary (PTO-413) Paper No(s) Informal Patent Application (PTO-152)	<b>_</b> ·
U.S. Patent and T PTO-326 (Re		tion Summary	Part of Paper N	lo. 13

Art Unit: 1732

#### DETAILED ACTION

1. The objection to the disclosure, the rejection of claims 52-58, 74, 79 and 80 under 35 USC § 112, second paragraph, the rejection of claims 52-58, 72, 74 and 78-80 under 35 USC § 102(b) in view of Marzocchi et al (U.S. Patent 3,273,987) and the rejection of claims 62-71 and 73-77 under 35 USC § 103(a) in view of Marzocchi et al (U.S. Patent 3,273,987) are all withdrawn.

# Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 52, 53 and 55-58 are rejected under 35 U.S.C. 102(b) as being anticipated by Clarke et al (U.S. Patent 4,690,836).

Clarke et al (abstract; col. 1, line 25 to col. 6, line 37; Examples) teach a prepreg material including a fibrous reinforcement and a resin composition (impregnating the fibrous reinforcement), wherein the prepreg material has substantially no voids. Although Clarke et al do not teach that the prepreg material is `formed by a step of impregnating a fibrous reinforcement at a first temperature with a molten resin composition, wherein the temperature of the molten resin composition is at least about 75°F(42°C) lower than the first temperature'' (from instant claim 52), the prepreg material of

Application/Control Number: 09/700,950 Page 3

Art Unit: 1732

Clarke et al is the same prepreg material product set forth in the instant claims (i.e., a fibrous reinforcement impregnated with a resin composition, having substantially no voids).

4. Claims 52, 54, 56 and 57 are rejected under 35 U.S.C. 102(b) as being anticipated by Cochran et al (U.S. Patent 5,236,646).

Cochran et al (col. 8, lines 38-60) teach a prepreg material including a fibrous reinforcement and a resin composition (impregnating the fibrous reinforcement), wherein the prepreg material has substantially no voids. Note that the resin compositions of Cochran et al include thermoplastic resins, which are generally applied in a molten state (and not in solution), and the prepreg material of Cochran et al is the same prepreg material product set forth in the instant claims (i.e., a fibrous reinforcement impregnated with a resin composition, having substantially no voids).

5. Claims 72, 74 and 78-80 are rejected under 35 U.S.C. 102(b) as being anticipated by Nose et al (EP 0 393 536 A2).

Nose et al (page 4, line 18 to page 8, line 45; Examples) teach an apparatus for making a reinforced matrix resin composition including a heater, a molten resin composition (in a container) and a compressing unit.

## Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Application/Control Number: 09/700,950 Page 4

Art Unit: 1732

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordin ary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 62-71, 73 and 75-77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nose et al (EP 0 393 536 A2).

Nose et al (page 4, line 18, to page 8, line 45; Examples) teach an apparatus for impregnating a continuous fiber material as set forth in the instant claims, except for means for applying a tension to the fibrous reinforcing material, which would have been obvious to one of ordinary skill in the art at the time the invention was made in Nose et al principally in order to hold the fibrous reinforcing material taut during impregnation.

## Response to Arguments

8. Applicant's arguments filed on 23 January 2003 have been fully considered but they are not persuasive.

With respect to the location of the heater in Nose et al (page 6 of the response), the instant claims do not specify (e.g., physically, structurally) the location of the heater and thus, Nose et al meets the presently-claimed limitations.

With respect to the resin temperature in the impregnation chamber (pages 6 and 7 of the response), note at least Example 1 of Nose et al.

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leo B.

Application/Control Number: 09/700,950 Page 5

Art Unit: 1732

Tentoni whose telephone number is (703) 308-3834. The examiner can normally be reached on Monday - Friday (6:30 A.M. - 3:00 P.M.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard D. Crispino can be reached on (703) 308-3853. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Leo B. Tentoni Primary Examiner

Leo B. Tentoni

Art Unit 1732

lbt February 10, 2003